**PP-049** Capillary zone electropherogram detects charge-transfer in natural bis-benzyl-isoquinolines aimed at liver remedy

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**Background:** Natural protobereridine (bis-benzyl-isoquinoline) alkaloids are widely used in the therapy of various diseases in folk medicine in many tropical regions. In this study, we have taken a batch from the bark *Enantia chlorantha*, Olivi. (Annonaceae), separated with the method for quersetin in pharmacognosy, and then analysed the mixture with CG-chromatography. The results obtained for bis-benzyl-isoquinolines were: 63% palmatine, 8% columbamine, 19% jatrorrhizine, 9% pseudocolumbamine, and 1% pseudopalmitine. The goal-oriented and dominating, palmatine is most sensitive in aqueous solution to hydride transfer in order to complete the natural balance when the equilibrium was artificially disturbed. Methods: The influence of capillary zone electropherogram (CZE) analysis was utilized in charge-transfer spectra occurring in natural bis-benzyl-isoquinoline alkaloids under the forces when evaporated to dryness from the azeotropic solution.

**Results:** This reduction method takes care of numerous electron-transfers in order to maintain the natural properties and even strengthen the therapeutic potency about 100 times. The visible and very intensive reduced CZE-electropherogram spectra show that the electron-transfer is sufficient.

**Conclusion:** The method is recommended to select the liver therapeutics alkaloids from the natural variety, which is verified finally with the treatment of D-galactosamine traumatized laboratory rats. This traumatization mimics the liver injury originating from injury of ordinary HBV. The recovery after this traumatization was almost complete, as discovered in microscopic studies from liver biopsy.

**Posters**

**PP-050** New trends of HIV/AIDS epidemic in one of the largest areas in Russia

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**Background and Aims:** The aim of the research was a detailed study and analysis of current trends of HIV/AIDS epidemiology in one of the largest areas in Central Russia in order to show the growing need for prevention, treatment and care for people living with HIV/AIDS in the region.

**Methods:** We studied the official HIV/AIDS epidemiological data of the region within the entire period of the epidemic.

**Results:** As for July 2008, a cumulative registered number of people living with HIV/AIDS were 5,933. It is likely that there are 17,000–22,000 people living with HIV/AIDS in the region. The HIV incidence was 10.4 per 100,000. Not so young people ages 26 to 30 dominated (36.1%) in the age structure of HIV infected people (28.2% in 2007), HIV infection was attributed so far to injection drug use (73.5% of all registered cases). Since 2002, experts have identified an increase in the sexual transmission. In 2008, 53.3% were attributed to sexual contact. The most negative trend – the proportion of women infected increases. In 2008, women comprised 42.9%. There is an increase in the potential for the growing mother-to-child HIV transmission. Unfortunately HIV spreads more widely from vulnerable groups into the general population.

**Conclusions:** The results of our study show the new basic trends in HIV/AIDS epidemic progression and are used for making estimates and help policymakers and health care professionals to determine the impact of specific programs in the region.

**PP-051** Clinical analyses of the skin mucocutaneous diseases in 796 HIV infection cases

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**Objectives:** This study aims to explore the correlation between the disease variety and the number of varieties of skin mucocutaneous diseases and the immunity functions of patients before Highly Active Antiretroviral Therapy (HAART), compare the changes of the spectrum of each skin mucocutaneous disease among HIV infected/AIDS patients before and after HAART.

**Methodology:** The research team conducted a retrospective research on the data of 796 HIV/AIDS cases in which the patients had their first visits to Beijing YouAn Hospital Outpatient Services Department or been admitted into the hospital from May 2001 to May 2007. Through the research, the team would observe the incidence and clinical characteristics of various skin diseases among HIV infected patients in China, conduct the analyses of correlations between the number of varieties, incidence and the specific cellular immunity of AIDS patients and further to understand the variations of spectrum of skin diseases before and after HAART.

**Results:** 531 patients (81.6%) in total cases had skin mucocutaneous manifestations before HAART in which the infectious diseases and pruritic diseases were most common, more serious skin lesions, easy to recur and resistant to ordinary treatments. The average number of CD4 T cells and the ratio of CD4/CD8 (185.13/ul and 0.22 respectively) in skin mucocutaneous manifestations group were significantly less than that in no-skin mucocutaneous manifestations group (305.76/ul and 0.34 respectively). The comparisons between the two groups had significant statistic meanings (p<0.05); among them, the standard of CD4+ T cells was closely correlated with the incidence and the number of varieties; the incidences of skin diseases among 143 cases who have been started HAART were significantly reduced (29%), most of incidences were drug eruptions followed by dermatitis eczema, nodular prurigo and herpes zoster.

**Conclusions:** Before HAART, the incidences of skin mucocutaneous diseases among HIV/AIDS patients were high. The characteristics were that their clinical symptoms were atypical, ordinary therapeutic efficacy was not good and HAART could bring the real improvement of skin lesions among patients. The disease variety, the number of varieties and the clinical manifestations of skin mucocutaneous diseases were closely correlated with the lower immunity due to HIV infection.

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